

OZONE IN KANSAS CITY

The Kansas City metropolitan area was designated as a sub-marginal **ozone nonattainment area** under the Clean Air Act Amendments of 1990. In 1992, the Kansas City area demonstrated compliance with the standard and was redesignated to **attainment** and renamed an **ozone** maintenance area. The Kansas City **ozone** maintenance area includes Clay, Jackson and Platte counties in Missouri as well as Johnson and Wyandotte counties in Kansas.

In 2002, Kansas City reported **no exceedances** of the one-hour **ozone** standard for the second consecutive year. The table below shows the number of days each site reported exceeding the one-hour **ozone** standard between 1992 and 2002.

There were 19 **exceedances** of the eight-hour **ozone** standard in 2002, up from four in 2001. The only site to

monitor a violation is the Liberty site. Another site at Rocky Creek was installed by the Kansas City Air Quality Program this year, and also showed high eight-hour **ozone** levels. If similar levels continue for the three-year period necessary to assess **attainment**, this site may monitor a violation. The Kansas City Program also discontinued the Worlds of Fun site. The State of Kansas has also indicated its intent to install samplers in Leavenworth County and southern Johnson County.

CONTROLLING KANSAS CITY OZONE

The Kansas City area has experienced **ozone** problems since the late 1970s. In response to the Clean Air Act Amendments of 1990, EPA published two regulations that reduced the Reid Vapor Pressure (RVP) of gasoline in the Kansas City area. From 1990

Number of Days with Excessive Ozone - Kansas City Ozone Maintenance Area

Number of One-Hour Exceedances												
Site	91	92	93	94	95	96	97	98	99	00	01	02
<i>Kansas City</i>												
<i>Missouri</i>												
Liberty	0	0	1	0	3	0	1	2	0	0	0	0
Watkins Mill	0	0	0	0	3	0	0	1	0	0	0	0
Worlds of Fun	0	0	0	0	2	0	0	0	0	0	0	0
Richards Gebaur	1	0	0	0	0	0	0	0	0			
Belton RG-South										1	0	0
KCI	0	1	0	0	1	0	1	1	0	1	0	0
<i>Kansas</i>	91	92	93	94	95	96	97	98	99	00	01	02
Wyandotte CO	0	0	1	0	0	1	0	1	0	0	0	0
<i>Total</i>	1	1	2	0	9	1	2	5	0	2	0	0

through 1997, RVP of gasoline in Kansas City has been reduced on three occasions. The latest change occurred during summer 2001. The Department of Natural Resources and Kansas Department of Health and Environment required that 7.0 Reid Vapor Pressure gasoline be sold in the Kansas City Maintenance Area during the peak **ozone** season.

The Air Pollution Control Program developed an **ozone** control strategy after working with the Mid-America Regional Council (MARC), the Kansas Department of Health and Environment, Kansas City local agencies and industry representatives. This strategy was to be used in place of the contingency measures presented in the 1992 Kansas City **Ozone Maintenance State Implementation Plan**. The department presented this plan to the **Missouri Air Conservation Commission** in April 1997. The commission asked the Department of Natural Resources to remove inspection and maintenance from this plan and replace it with a faster control program. After discussions with MARC and other community representatives, a control strategy including **reformulated gasoline (RFG)** was developed. The revised maintenance plan called for **RFG** to be sold in the Kansas City area starting in 2000. The **Missouri Air Conservation Commission** adopted the Maintenance Plan in February 1998. This plan required the department to recommend that the Governor of Missouri ask EPA to include the Kansas City area in the federal **RFG** program by April 2000.

RFG would have replaced low RVP gasoline as the fuel control strategy. The Department of Natural Resources and the Kansas Department of Health

and Environment hosted a Fuels Summit in June 1999. This summit resulted in a recommendation to proceed with **RFG**. The governors of Kansas and Missouri opted into the **RFG** program at the end of July 1999. However, a lawsuit against EPA blocked the use of federal **RFG** in former **ozone nonattainment areas**, including Kansas City.

The petroleum interests offered to supply Kansas City with a 7.0 RVP gasoline beginning in 2001. Missouri and the State of Kansas started 7.0 RVP gasoline programs on June 1, 2001. Additionally, Missouri adopted new requirements for cold solvent cleaning, aerospace coatings and Stage I vapor recovery systems. Cold cleaners are now required to use low vapor pressure solvents. A new rule controls VOC content of aerospace coatings. The Stage I Vapor Recovery program was amended to require enhanced reporting and record-keeping, increased inspection frequency and installation of pressure vacuum relief valves. Also, required are vapor poppets on all Stage I coaxial systems.

During January 2002, EPA issued the MOBILE 6 model for use in calculating on-road mobile emissions. Through an interagency consultation group process with the assistance of MARC, it was decided to use the MOBILE 6 model in calculating on-road mobile emissions and to develop area, point and off-road emissions inventory numbers for 1999. The MARC Board approved the Mobile Budgets created using the MOBILE 6 model. The Kansas City **Ozone** Maintenance Plan was then updated using the new Mobile Budgets and adopted by the **Missouri Air Conservation Commission** on July 25, 2002.

On Sept. 24, 2002, a new set of population and employment forecasts were released and approved by MARC. Kansas and Missouri reviewed new information and developed a new area inventory and mobile emission budget. The new Mobile Budget was adopted by the MACC on Dec. 5, 2002.

Conformity Analysis/Determination

In accordance with the 1990 Clean Air Act - section 176(c), all transportation plans, programs and projects are required to conform to air quality plans for transportation-related pollutants in **nonattainment** and maintenance areas. The air quality conformity analysis/determination is the Clean Air Act requirement that calls for EPA, the United States Department of Transportation and various Missouri and Illinois State, regional and local government agencies to join together in the air quality and transportation planning development process. Transportation conformity supports the development of transportation plans, programs and projects that allow areas to meet and maintain national air quality standards for **ozone**, particulate matter and **carbon monoxide**, which impact human health and the environment.

The Mid-America Regional Council conducts and coordinates the air quality conformity analysis/determination for Kansas City in cooperation with EPA, the United States Department of Transportation and various Missouri and Kansas state, regional and local government agencies. Currently, the air quality conformity analysis/determination is performed on an annual basis.